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10/634,367	08/05/2003	Thomas Senn	97634.00175	6916
72535 7590 04/22/2009 MCCARTER & ENGLISH, LLP STAMFORD FINANCIAL CENTRE , SUITE 304A 695 EAST MAIN STREET STAMFORD, CT 06901-2138				
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			HANG, VU B	
			ART UNIT	PAPER NUMBER
			2625	
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			04/22/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/634,367

Applicant(s)

SENN, THOMAS

Examiner

Vu B. Hang

Art Unit

2625

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-85/86)
- Paper No(s)/Mail Date 08/05/2003
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

- This office action is responsive to the communication filed on 02/12/2009.
- The amendments received on 02/12/2009 have been entered and made of record.
- Claims 1-21 are pending in the current application.

Response to Arguments

1. Applicant's arguments filed on 02/12/2009 have been fully considered but they are not persuasive.
2. Regarding **Claim 1**, the applicant argues that the Examiner failed to address all of the claim limitations for Claim 1. First the applicant argues that the examiner failed to address the claim limitation "an edition printing stage in which edition printing is carried out by way of the printing plates in the printing machine." In response, the examiner points out that Geissler was cited for disclosing a printing process in which digital printing data are transmitted to a print shop by way of a data channel for production in the print shop of printing plates by way of digital printing data (see Fig. 1 (2,6,8), Fig.2 (24,26) and Col.7, Line 62 - Col.8, Line 1). The printing stage 2 of Figure 1 provides a printing process using print data in production print format and the printing plates in the printing machine. Production prints (edition printing) take place at printing stage 2.
3. The applicant further argues that the examiner failed to address the claim limitation "producing test image data representing a test image by image wise colorimetric measurement of at least one edition printing sample". In response, the examiner points out that Geissler was cited for disclosing a printing process in which test image data representing a test image by image

wise colorimetric measurement of at least one printing sample is produced by way of a color measurement (see Fig. 1 (2,7,8,9), Col.7, Line 23-46 and Col.8, Line 28-32), the test image being calculated from the digital printing data (see Fig. 1 (1,5), Col.7, Line 7-14 and Col.7, Line 37-44). As mentioned earlier, printing stage 2 of Figure 1 provides production prints (edition prints). The test data are actual prints from the printing stage 2 are also used as test data for print calibration. The test prints are measured at the color measuring device 7 of Figure 1 for print calibration.

4. The applicant also argues that the Examiner fails to address the claim limitation "releasing edition printing with printing plates if color deviations between the master image data and the test image data are in acceptable limit. In response, the examiner cited Geissler for teaching a method for controlling the printing process through quality monitoring (see Fig. 1 (1,2,4,6,8,11) and Col.8, Line 28-32). Romano was cited for teaching a method for calibrating digital plate setters or image setters (see Fig.3. Fig.7A and Col.2, Line 48-55), in which test image data are used to confirm the acceptability of the image data (see Fig.7A, Fig.8 and Co. 13, Line 10-20), wherein the quality of the recorded images can be continuously monitored and the plate/image setter can be automatically adjusted to ensure proper recording of the desired image (see Col.8, Line 40-45 and Col.13, Line 36-40). The examiner points out that it is obvious to combine the teaching of Geissler's and Romano's. The motivation would be to obtain the desired image data for the edition printing. The repeat adjustments/corrections on the image data would enable for the image data to reach the quality level desired for the edition printing.

5. Regarding **Claim 21**, the applicant argues that the Examiner failed to address all of the claim limitations for Claim 1. First the applicant argues that the examiner failed to address the

claim limitation "a printing process involving two stages, a pre-print stage and an edition printing stage which comprises the pre-printing stage and producing the printing plates in the print shop using digital printing data for use in the edition printing to be carried out in the printing machine." In response, the examiner points out that Geissler was cited for disclosing a pre-printing stage in which digital master image data are provided which represents an original master (see Fig. 1 (1,5) and Col.7, Line 4-14); and a printing process in which digital printing data are transmitted to a print shop by way of a data channel for production in the print shop of printing plates by way of digital printing data (see Fig. 1 (2,6,8), Fig.2 (24,26) and Col.7, Line 62 - Col.8, Line 1). The printing stage 2 of Figure 1 provides a printing process using print data in production print format and the printing plates in the printing machine. Production prints (edition printing) take place at printing stage 2. The test image data are used to calibrate and create print data that is to be used for the printing plates.

6. The applicant further argues that the examiner failed to address the claim limitation "using the color control of the printing machine test image data corresponding to a test image produced by an image wise colorimetric measurement of at least one edition printing sample." The applicant further argues that the examiner failed to address the claim limitation "producing test image data representing a test image by image wise colorimetric measurement of at least one edition printing sample". In response, the examiner points out that Geissler was cited for disclosing a printing process in which test image data representing a test image by image wise colorimetric measurement of at least one printing sample is produced by way of a color measurement (see Fig. 1 (2,7,8,9), Col.7, Line 23-46 and Col.8, Line 28-32), the test image being calculated from the digital printing data (see Fig. 1 (1,5), Col.7, Line 7-14 and Col.7, Line 37-

44). As mentioned earlier, printing stage 2 of Figure 1 provides production prints (edition prints). The test data are actual prints from the printing stage 2 are also used as test data for print calibration. The test prints are measured at the color measuring device 7 of Figure 1 for print calibration.

7. The applicant also argues that the Examiner fails to address the claim limitation “releasing edition printing with printing plates if color deviations between the master image data and the test image data are in acceptable limit. In response, the examiner cited Geissler for teaching a method for controlling the printing process through quality monitoring (see Fig. 1 (1,2,4,6,8,11) and Col.8, Line 28-32). Romano was cited for teaching a method for calibrating digital plate setters or image setters (see Fig.3. Fig.7A and Col.2, Line 48-55), in which test image data are used to confirm the acceptability of the image data (see Fig.7A, Fig.8 and Co. 13, Line 10-20), wherein the quality of the recorded images can be continuously monitored and the plate/image setter can be automatically adjusted to ensure proper recording of the desired image (see Col.8, Line 40-45 and Col.13, Line 36-40). The examiner points out that it is obvious to combine the teaching of Geissler’s and Romano’s. The motivation would be to obtain the desired image data for the edition printing. The repeat adjustments/corrections on the image data would enable for the image data to reach the quality level desired for the edition printing.

8. The applicant also argues that the cited prior art, Romano et al. (US Patent 6,219,154 B1), fails to disclose or make obvious the use of an edition printing sample to perform quality monitoring and printer calibration for edition printing. In response, the examiner points out that the applicant had overlooked the cited primary reference (Geissler) in this argument. As explained in the arguments above and the previous rejections made for Claims 1 and 21, Geissler

teaches the use of an edition printing sample to perform quality monitoring and printer calibration for edition printing. Romano was cited for teaching a method for calibrating digital plate setters or image setters (see Fig.3, Fig.7A and Col.2, Line 48-55), in which test image data are used to confirm the acceptability of the image data (see Fig.7A, Fig.8 and Co. 13, Line 10-20), wherein the quality of the recorded images can be continuously monitored and the plate/image setter can be automatically adjusted to ensure proper recording of the desired image (see Col.8, Line 40-45 and Col.13, Line 36-40). The examiner points out that it is obvious to combine the teaching of Geissler's and Romano's. The motivation would be to obtain the desired image data for the edition printing. The repeat adjustments/corrections on the image data would enable for the image data to reach the quality level desired for the edition printing.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-4, 6, 8-14 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geissler et al. (US Patent 7,262,880 B2) in view of Romano et al. (US Patent 6,219,154 B1).

11. Regarding **Claim 1**, Geissler discloses a printing process (see Fig. 1 (2,8) and Col.2, Line 29-35) comprising: a pre-printing stage in which digital master image data are provided which represents an original master (see Fig. 1 (1,5) and Col.7, Line 4-14), digital printing data for the

printing colors involved in the printing that are produced from the master image data, which the digital printing data are transmitted to a print shop by way of a data channel for production in the print shop of printing plates by way of digital printing data (see Fig. 1 (2,6,8), Fig.2 (24,26) and Col.7, Line 62 - Col.8, Line 1), and an edition printing stage in which edition printing is carried out by way of the printing -plates in the printing machine (see Fig.1 (2), Fig.2 (24,26) and Col.7, Line 62 – Col.8, Line 1) [Note: The printing stage 2 of Figure 1 provides printing using print data in production print format and the printing plates in the printing machine. Production prints take place at printing stage 2.], the printing process further comprising the steps of: (a) producing test image data representing a test image by image wise colorimetric measurement of at least one printing sample by way of a color measurement (see Fig. 1 (2,7,8,9), Col.7, Line 23-46 and Col.8, Line 28-32), the test image being calculated from the digital printing data (see Fig. 1 (1,5), Col.7, Line 7-14 and Col.7, Line 37-44); (b) transmitting the test image data produced in the print shop to the pre-printing stage through a data channel (see Fig. 1 (1,2,6,7,8,9) and Col.7, Line 34-43); (c) evaluating the test image data for quality monitoring (see Fig.1 (3,10), Col.7, Line 37-46 and Col.8, Line 11-26); (d) transmitting the result of the quality monitoring through a data channel (see Fig.1 (1,6,10,11)); and (e) using in the print shop the result of the quality monitoring transmitted from the quality monitoring stage in order to control the printing process (see Fig. 1 (1,2,4,6,8,11) and Col.8, Line 28-32).

12. Geissler fails to expressly disclose a repeat process for calibrating the color deviations between the master image data and the test image data when they are not in acceptable limits; and releasing the edition printing with the printing plates if color deviations between the master image data and the test image data are in acceptable limits. Geissler, however, teaches

controlling the printing process through quality monitoring (see Fig. 1 (1,2,4,6,8,11) and Col.8, Line 28-32). Romano teaches a method for calibrating digital plate setters or image setters (see Fig.3, Fig.7A and Col.2, Line 48-55), in which test image data are used to confirm the acceptability of the image data (see Fig.7A, Fig.8 and Co. 13, Line 10-20). Romano further teaches that the quality of the recorded images can be continuously monitored and the plate/image setter can be automatically adjusted to ensure proper recording of the desired image (see Col.8, Line 40-45 and Col.13, Line 36-40).

13. Geissler and Romano are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art to the steps to repeat the quality monitoring/color calibration process for the color deviations between the master image data and the test image data, and to release the edition printing with the printing plates when the master image data and the test image data are within acceptable limits. The motivation would be to obtain the desired image data for the edition printing. The repeat adjustments/corrections on the image data would enable for the image data to reach the quality level desired for the edition printing.

14. Regarding **Claim 2**, Geissler further discloses determining and then transmitting in the pre-printing stage measurement positions and nominal color values at these measurements positions through a data channel to the print shop (see Fig.1 (1,4,6,7,11), Col.8, Line 2-10 and Col.8, Line 24-28), and using the nominal color values in the print shop for the color control of the printing machine (see Fig. 1 (1,4,6,7,11) and Col.8, Line 28-32).

15. Regarding **Claim 3**, Geissler further discloses using a spectrally operating color measurement system for the image wise colorimetric measurement system for the image wise

colorimetric measurement of the edition printing sample (see Fig. 1 (7,8,9) and Col.8, Line 2-10) and wherein the test image data transmitted to the pre-printing stage are spectral data which include for each measured image point remission values for several different wavelengths (see Fig.2 (7,10) and Col.8, Line 2-10).

16. Regarding **Claim 4**, Geissler and Romano teach the printing process of Claim 3 but fail to disclose that the test image data transmitted to the pre-printing stage are spectral data which include for each measured image point, remission values for 16 wavelengths in the range of 400 to 700nm with respective spacing of 20nm. At the time of the invention, it would have been obvious for one skilled in the art to use test image data containing specific remission values. The motivation would be for design choice reasons. A designer may determine the level of accuracy needed for the quality monitoring, and use the test image data with the appropriate remission values.

17. Regarding **Claim 6**, Geissler further discloses quality monitoring of color deviations between nominal color values and the corresponding color measurement values contained in the test image data (see Fig.1 (1,3,7,9,10,11), Col.8, Line 2-10 and Col.8, Line 17-23).

18. Regarding **Claim 8**, Geissler further discloses wherein the reference image is a test print or a trial print produced in the pre-printing stage using the digital printing data (see Fig. 1 (3,8,9,10) and Col.8, Line 2-10).

19. Regarding **Claim 9**, the rationale provided for the rejection of Claim 1 is incorporated herein.

20. Regarding **Claim 10**, the rationale provided for the rejection of Claim 1 is incorporated herein.

21. Regarding **Claim 11**, the rationale provided for the rejection of Claim 1 is incorporated herein.
22. Regarding **Claim 12**, the rationale provided for the rejection of Claim 1 is incorporated herein.
23. Regarding **Claim 13**, the rationale provided for the rejection of Claim 1 is incorporated herein.
24. Regarding **Claim 14**, Geissler further discloses wherein the quality monitoring includes a protocolling of the print quality (see Fig. 1 (1,3,6,7,11) and Col.7, Line 12-19).
25. Regarding **Claim 21**, the rationale provided for the rejection of Claim 1 is incorporated herein.
26. Claims 5 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geissler et al. (US Patent 7,262,880 B2) in view of Romano et al. (US Patent 6,219,154 B1), and in further view of Lavery et al. (US Patent 6,429,947).
27. Regarding **Claim 5**, Geissler discloses calculating a test image on basis of a test image data transferred to the pre-printing stage (see Fig. 1 (1,4,6,7,11) and Col.7, Line 37-53), but Geissler and Romano fail to disclose visually displaying the test image with a reference image on a screen for quality monitoring. Geissler, however, teaches controlling the printing process through quality monitoring (see Fig.1 (1,2,4,6,8,11) and Col.8, Line 28-32). Lavery teaches providing a display preview of a print product floor customer approval (see Fig. 1 and Col.2, Line 50-52) and passing a proof to a customer for approval (see Fig. 1 and Col.6, Line 20-35).
28. Geissler, Romano and Lavery are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been

obvious for one skilled in the art include to the printing process of Claim 1 a means for visually displaying the test image with a reference image on a screen for quality monitoring. The motivation would be to provide a visual proofing means for ensuring that the desired image quality is obtained. The visual display of the test image with a reference image on a display screen could determine whether further calibration/correction is needed for the image data.

29. Regarding **Claim 15**, the rationale provided for the rejection of Claim 5 is incorporated herein.

30. Regarding **Claim 16**, the rationale provided for the rejection of Claim 5 is incorporated herein.

31. Regarding **Claim 17**, the rationale provided for the rejection of Claim 5 is incorporated herein.

32. Regarding **Claim 18**, the rationale provided for the rejection of Claim 5 is incorporated herein.

33. Regarding **Claim 19**, Geissler discloses image-wise measuring in the pre-printing stage the test print binding for quality evaluation using the spectral color measurement system (see Fig.1 (1,3,7,9,10,11) and Col.8, Line 2-10) but Geissler and Romano fail to disclose producing a screen display of the test print from the image data obtained, thereby using the screen display as a reference image for comparison with the test image. Geissler, however, teaches controlling the printing process through quality monitoring (see Fig. 1 (1,2,4,6,8,11) and Col.8, Line 28-32). Laverty teaches providing a display preview of a print product for customer approval (see Fig.1 and Col.2, Line 50-52) and passing a proof to a customer for approval (see Fig.1 and Col.6, Line 20-35).

34. At the time of the invention, it would have been obvious for one skilled in the art to include to the printing process of Claim 1 a means for producing a screen display of the test print from the image data obtained, thereby using the screen display as a reference image for comparison with the test image. The motivation would be to provide a visual proofing means for ensuring print satisfaction. The screen display displaying the test prints, would enable a print operator or customer the opportunity to visually monitor and approve the processed image data for printing.

35. Regarding **Claim 20**, Geissler and Romano teach the printing process of Claim 1 but fail to expressly disclose the color measurement system is equipped with a goniometric measurement means, which allows illumination in different directions for the image capture. Geissler, however, discloses a color measurement system that measures different area coverage and positions of the colors from the image capture (see Fig.2 (27) and Col.8, Line 2-10), and performing spectral measurements for the colors in the image capture (see Fig. 1 (3,7) and Col.8, Line 2-10). At the time of the invention, it would have been obvious for one skilled in the art to include to the color measurement system a goniometric measurement means that allows illumination in different directions for the image capture. The motivation would be to perform the spectral data or densitometric measurements on the obtained image data to produce the test color image data. The spectral data or density data of the captured image data are obtained through measuring the different angles of the colors in the image data, for which goniometric measurements can be applied.

36. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geissler et al. (US Patent 7,262,880 B2) in view of Romano et al. (US Patent 6,219,154 B1), and in further view of Rasmussen et al. (US Patent 6,912,071 B1).

37. Regarding **Claim 7**, Geissler discloses producing digital test print data from the test image data from the pre-printing stage (see Fig. 1 (4,5) and Col.7, Line 7-10), producing a physical test print using the digital test print data (see Fig. 1 (3,7,8,9) and Col.7, Line 37-53) and comparing the test print with a reference image during quality monitoring (see Fig. 1 (3) and Col.8, Line 17-23). Geissler fails to expressly disclose a visual comparison of the test print with a reference image. Geissler, however, teaches controlling the printing process through quality monitoring (see Fig. 1 (1,2,4,6,8,11) and Col.8, Line 28-32). Rasmussen discloses producing a physical test print by way of the digital test print data for visually monitoring the image quality of a print product (see Fig.6 and Col.9, Line 15-21).

38. Geissler, Romano and Rasmussen are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for producing a physical test print by way of the digital test print data and visually comparing the test print with a reference image. The motivation would be to provide a visual proofing means for ensuring print satisfaction. The printed physical test prints, along with a reference image would enable a print operator or customer the opportunity to visually monitor and approve the processed image data for printing.

Conclusion

39. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

40. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

41. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571)272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.

42. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K. Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

43. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Vu B. Hang/
Examiner, Art Unit 2625

/David K Moore/
Supervisory Patent Examiner, Art Unit 2625